ABSTRACT

Pseudoelastic elements are shaped in order to form springs which exhibit relatively constant force levels over a major fraction of maximum deflection capacity during loading and also during unloading. The shape of sail pseudoelastic elements is chosen to concentrate at least one of flexural and torsional deformations within limited regions. The element may be braced outside said regions in order to further concentrate deformations within said regions. Loading of said pseudoelastic springs thus produces strains within said regions which are largely corresponding to the upper pseudoelastic stress plateau where strain variations cause relatively small changes in stress. Unloading of said pseudoelastic springs also produces strains within said regions which are largely corresponding to the lower stress plateau of the pseudoelastic stress-strain curve where stress is subject to relatively small changes with strain variations. Said psueodoelastic springs can be used in brush holders which can benefit from a relatively constant level of force as deflections occur due to brush wear.